

10/088352

JC10 Rec'd PCT/PTO 15 MAR 2002

Patent
Attorney's Docket No. 018793-260

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)
Yoriaki MATSUZAKI et al.) Group Art Unit: Unknown
Application No.: Unknown) Examiner: Unknown
Filed: March 15, 2002)
For: AQUEOUS INK AND PROCESS)
FOR PRODUCING DYE)

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to the first Official Action, please amend the above-identified patent application as follows:

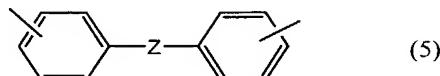
IN THE CLAIMS:

Kindly amend claims 3, 4, 10-14 as follows:

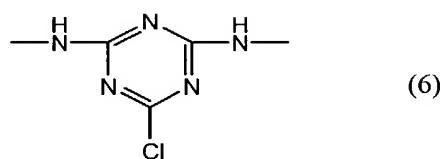
3. (Amended) The aqueous ink for ink jet recording according to claim 2, wherein in the formula (A), X is an optionally substituted phenylene group.

4. (Amended) The aqueous ink for ink jet recording according to claim 3, wherein in the formula (A), A is a naphthyl group (the naphthyl group may be substituted with any of a halogen atom, a hydroxyl group, an amino group, an optionally substituted alkyl group, an alkoxy group, a carboxyl group, a carboxylic acid ester group, a carboxylic acid amide group, a sulfonic acid group and a sulfonic acid amide group).

10. (Amended) The process for producing the dye according to claim 9, wherein in the formula (C), X is an alkylene group, a phenylene group, a xylylene group, a naphthylene group, a biphenylene group or a divalent bonding group represented by the formula (5)



in which Z represents an oxygen atom, a sulfur atom, -CO-, -NHCONH-, -NHCSNH-, -CH=CH- or the formula (6)

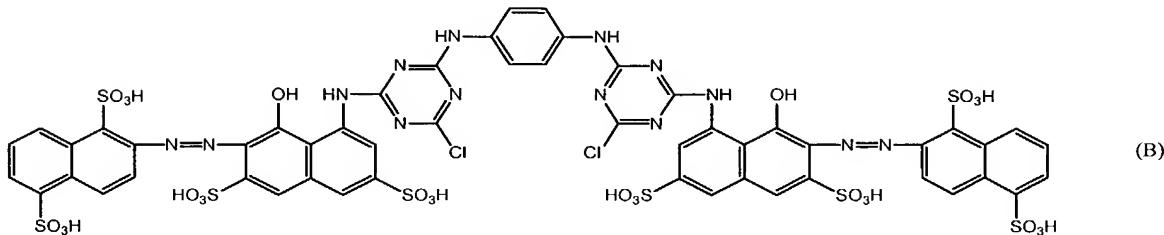


(these bonding groups may be substituted with a halogen atom, an alkyl group, an alkoxy group, a hydroxyl group, an amino group, a carboxyl group or a sulfonic acid group).

11. (Amended) The process for producing the dye according to claim 9, wherein in the formula (C), X is an optionally substituted phenylene group.

12. (Amended) The process for producing the dye according to claim 9, wherein in the formula (C), A is a naphthyl group (the naphthyl group may be substituted with any of a halogen atom, a hydroxyl group, an amino group, an optionally substituted alkyl group, an alkoxy group, a carboxyl group, a carboxylic acid ester group, a carboxylic acid amide group, a sulfonic acid group and a sulfonic acid amide group).

13. (Amended) The process for producing the dye according to claim 9, wherein the dye is a dye represented by the formula (B)



or its salt.

14. (Amended) Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 13.

Please add the following new claims:

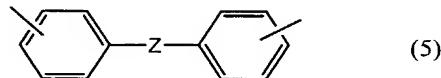
15. The aqueous ink for ink jet recording according to claim 1, wherein in the formula (A), X is an optionally substituted phenylene group.

16. The aqueous ink for ink jet recording according to claim 15, wherein in the formula (A), A is a naphthyl group (the naphthyl group may be substituted with any of a halogen atom, a hydroxyl group, an amino group, an optionally substituted alkyl group, an alkoxy group, a carboxyl group, a carboxylic acid ester group, a carboxylic acid amide group, a sulfonic acid group and a sulfonic acid amide group).

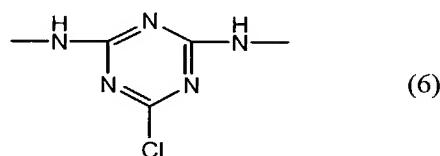
17. The aqueous ink for ink jet recording according to claim 2, wherein in the formula (A), A is a naphthyl group (the naphthyl group may be substituted with any of a halogen atom, a hydroxyl group, an amino group, an optionally substituted alkyl group, an alkoxy group, a carboxyl group, a carboxylic acid ester group, a carboxylic acid amide group, a sulfonic acid group and a sulfonic acid amide group).

18. The aqueous ink for ink jet recording according to claim 1, wherein in the formula (A), A is a naphthyl group (the naphthyl group may be substituted with any of a halogen atom, a hydroxyl group, an amino group, an optionally substituted alkyl group, an alkoxy group, a carboxyl group, a carboxylic acid ester group, a carboxylic acid amide group, a sulfonic acid group and a sulfonic acid amide group).

19. The process for producing the dye according to claim 8, wherein in the formula (C), X is an alkylene group, a phenylene group, a xylylene group, a naphthylene group, a biphenylene group or a divalent bonding group represented by the formula (5)

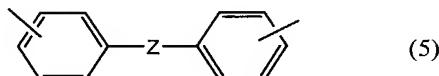


in which Z represents an oxygen atom, a sulfur atom, -CO-, -NHCONH-, -NHCSNH-, -CH=CH- or the formula (6)

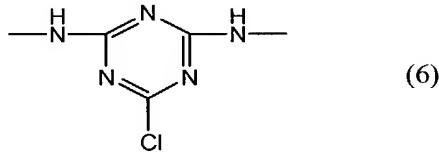


(these bonding groups may be substituted with a halogen atom, an alkyl group, an alkoxy group, a hydroxyl group, an amino group, a carboxyl group or a sulfonic acid group).

20. The process for producing the dye according to claim 7, wherein in the formula (C), X is an alkylene group, a phenylene group, a xylylene group, a naphthylene group, a biphenylene group or a divalent bonding group represented by the formula (5)



in which Z represents an oxygen atom, a sulfur atom, -CO-, -NHCONH-, -NHCSNH-, -CH=CH- or the formula (6)



(these bonding groups may be substituted with a halogen atom, an alkyl group, an alkoxy group, a hydroxyl group, an amino group, a carboxyl group or a sulfonic acid group).

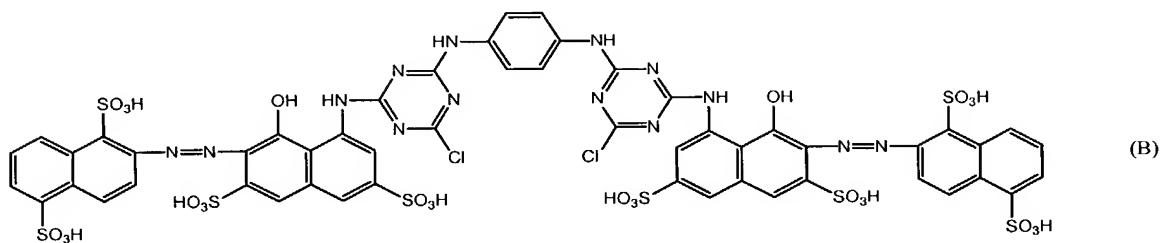
21. The process for producing the dye according to claim 8, wherein in the formula (C), X is an optionally substituted phenylene group.

22. The process for producing the dye according to claim 7, wherein in the formula (C), X is an optionally substituted phenylene group.

23. The process for producing the dye according to claim 8, wherein in the formula (C), A is a naphthyl group (the naphthyl group may be substituted with any of a halogen atom, a hydroxyl group, an amino group, an optionally substituted alkyl group, an alkoxy group, a carboxyl group, a carboxylic acid ester group, a carboxylic acid amide group, a sulfonic acid group and a sulfonic acid amide group).

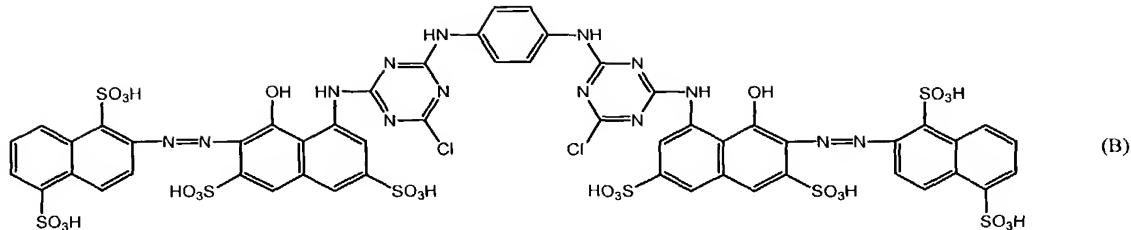
24. The process for producing the dye according to claim 7, wherein in the formula (C), A is a naphthyl group (the naphthyl group may be substituted with any of a halogen atom, a hydroxyl group, an amino group, an optionally substituted alkyl group, an alkoxy group, a carboxyl group, a carboxylic acid ester group, a carboxylic acid amide group, a sulfonic acid group and a sulfonic acid amide group).

25. The process for producing the dye according to claim 8, wherein the dye is a dye represented by the formula (B)



or its salt.

26. The process for producing the dye according to claim 7, wherein the dye is a dye represented by the formula (B)



or its salt.

27. Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 12.

28. Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 11.

29. Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 10.

30. Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 9.

31. Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 8.

32. Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 7.

33. Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 26.

34. Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 25.

35. Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 24.

36. Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 23.

37 Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 22.

38. Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 21.

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39. Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 20.

40. Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to claim 19.

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REMARKS

By the present Preliminary Amendment, all multiple dependency has been eliminated from the original claims and new dependent claims 15-40 have been added so that the scope of the original multiple dependent claims has been preserved. It is to be understood that the revisions to the claims are solely for formalistic purposes and not with regard to patentability.

Entry of the instant Preliminary Amendment and favorable consideration on the merits are respectfully requested.

Should the Examiner have any questions concerning the subject application, the Examiner is invited to contact the undersigned attorney at the number provided below.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: Robert G. Mukai
Robert G. Mukai
Registration No. 28,531

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

Date: March 15, 2002

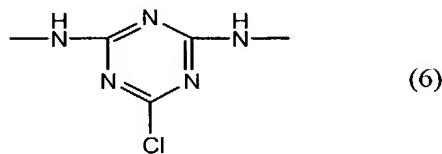
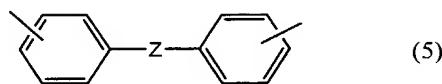
Attachment to Preliminary Amendment dated March 15, 2002

Marked-up Copy

3. (Amended) The aqueous ink for ink jet recording according to claim [1 or] 2, wherein in the formula (A), X is an optionally substituted phenylene group.

4. (Amended) The aqueous ink for ink jet recording according to [any one of claims 1 to] claim 3, wherein in the formula (A), A is a naphthyl group (the naphthyl group may be substituted with any of a halogen atom, a hydroxyl group, an amino group, an optionally substituted alkyl group, an alkoxy group, a carboxyl group, a carboxylic acid ester group, a carboxylic acid amide group, a sulfonic acid group and a sulfonic acid amide group).

10. (Amended) The process for producing the dye according to [any one of claims 7 to] claim 9, wherein in the formula (C), X is an alkylene group, a phenylene group, a xylylene group, a naphthylene group, a biphenylene group or a divalent bonding group represented by the formula (5)



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Marked-up Claims 3, 4, 10-14

in which Z represents an oxygen atom, a sulfur atom, -CO-, -NHCONH-, -NHCSNH-, -CH=CH- or the formula (6) (these bonding groups may be substituted with a halogen atom, an alkyl group, an alkoxy group, a hydroxyl group, an amino group, a carboxyl group or a sulfonic acid group).

11. (Amended) The process for producing the dye according to [any one of claims 7 to] claim 9, wherein in the formula (C), X is an optionally substituted phenylene group.

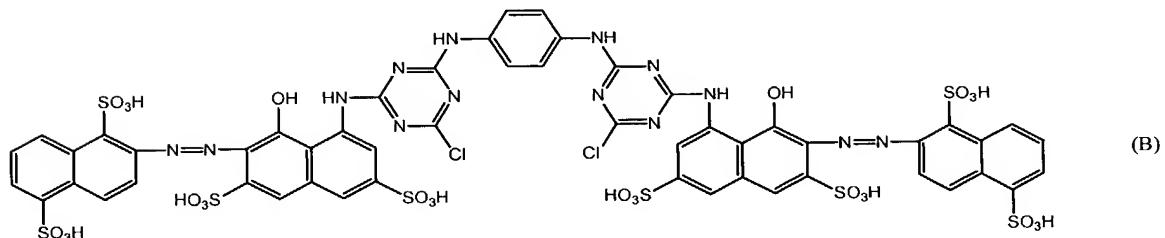
12. (Amended) The process for producing the dye according to [any one of claims 7 to] claim 9, wherein in the formula (C), A is a naphthyl group (the naphthyl group may be substituted with any of a halogen atom, a hydroxyl group, an amino group, an optionally substituted alkyl group, an alkoxy group, a carboxyl group, a carboxylic acid ester group, a carboxylic acid amide group, a sulfonic acid group and a sulfonic acid amide group).

13. (Amended) The process for producing the dye according to [any one of claims 7 to] claim 9, wherein the dye is a dye represented by the formula (B)

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Marked-up Claims 3, 4, 10-14



or its salt.

14. (Amended) Aqueous ink for ink jet recording characterized by containing at least one of the dyes produced by the process according to [any one of claims 7 to] claim 13.